THE WAY WE MOVE

TRANSPORTATION MASTER PLAN
SEPTEMBER 2009

THE CITY OF Edmonton

TRANSFORMING | EDMONTON
BRINGING OUR CITY VISION TO LIFE

SUMMARY OF TMP DIRECTIONS

Transportation and land use integration

An integrated approach to planning and developing the transportation system and land uses supports the creation of an efficient, sustainable, compact and vibrant city that maximizes the effectiveness of its investment in transportation infrastructure.

Public transportation as a cornerstone

A comprehensive public transportation system supports a sustainable, livable city where more people use transit as a preferred transportation choice.

Encouragement of active transportation

A walkable, cycle-friendly city supports the creation of a healthy, barrier-free, age-friendly and safe city where active modes are a preferred transportation choice.

Manage the transportation system more effectively

A comprehensive strategic approach to roads balances the objectives of the transportation system by focusing roadway expansions to improve the efficiency of goods, services and transit movements while using transportation operation, supply and demand management strategies to manage roadway congestion.

Roadway improvements focus on efficient goods movement

An efficient network for goods and services movements incorporates integrated multimodal and regional approaches to support commercial transportation needs.

Regional interface

A comprehensive, coordinated and integrated transportation system supports regional mobility, accessibility and economic vitality.

Well-maintained and managed infrastructure

A holistic approach to infrastructure investments supports the fiscal sustainability of the transportation system by considering life-cycle costs, adhering to a service life based asset management program and providing a robust operational maintenance program to facilitate year round transportation.

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EXECUTIVE SUMMARY

Transportation is more than moving people, goods and services on Edmonton roads, rails, buses, sidewalks, and light rail transit. It is essential infrastructure that shapes our urban form, impacts our economic well being and is a primary determinant of our city's environmental, financial and social sustainability.

How easily we move through our city, the distances we must travel, the transportation choices we have and how readily we can move between different transportation modes profoundly affects our relationship with the city, the environment and each other. As the major urban centre of regional industrial development, our city's transportation system is a contributing factor to the economic vitality and competitive advantage of Edmonton and the Capital Region.

We are building a 21st century city, shaping an Edmonton that will meet the needs of our diverse and growing urban and regional population. Growing environmental concerns, acknowledgment of the ongoing investment needed to maintain our transportation infrastructure and the rapid growth of our city demand a shift in transportation priority setting. It is a shift from single passenger vehicle use to more public transit; from building outward to a compact urban form. From an auto oriented view of transportation to a more holistic view of an interconnected, multi-modal transportation system where citizens can walk, bike, bus and train efficiently and conveniently to their desired location.

In 2007, Edmontonians offered their experiences and insights into the kind of city they envisioned Edmonton to be by 2040, resulting in the City Vision. Edmontonians also offered their views on our approach to land use (The Municipal Development Plan, *The Way We Grow*) and on transportation and the movement of people, goods and services (The Transportation Master Plan, *The Way We Move*).

To achieve the City Vision, City Council has identified six 10-year Strategic Goals that are outlined in The City of Edmonton's 2009-2018 Strategic Plan, *The Way Ahead*: Preserve and Sustain Edmonton's Environment; Improve Edmonton's Livability; Transform Edmonton's Urban Form; Shift Edmonton's Transportation Mode; Ensure Edmonton's Financial Sustainability; and Diversify Edmonton's Economy. The Transportation Master Plan (TMP) is consistent with and supportive of these goals.

The Transportation Master Plan is guided by and intended to achieve the City Vision. It establishes the framework for how the City of Edmonton will address its future transportation needs and is aligned with the Municipal Development Plan, *The Way We Grow*, to acknowledge that land use and transportation are inextricably linked. The Transportation Master Plan is based on seven Transportation Strategic Goals that define a vision for the transportation system. Each of these goals embodies the four guiding principles (integration, sustainability, livability, innovation) of *The Way Ahead*. These will guide City policies and direction on how best to manage the transportation system to contribute to the City Vision. Together these goals contribute to creating the kind of safe, vibrant, economically robust, culturally active and environmentally sustainable city Edmontonians said they envision.

TRANSPORTATION STRATEGIC GOALS: (CHAPTER 2)

Transportation and Land Use Integration

The transportation system and land uses/urban design complement and support each other so that the use of transit and transportation infrastructure is optimized and supports best practices for land use.

Access and Mobility

The transportation system is interconnected and integrated to allow people and goods to move efficiently throughout the city and to provide reasonable access with a variety of modes for people across demographic, geographic, socio-economic and mobility spectrums.

Sustainability

Transportation decisions reflect an integrated approach to environmental, financial and social impacts thereby creating sustainable, livable communities that minimize the need for new infrastructure and increase quality of life.

Health and Safety

The transportation system supports healthy, active lifestyles and addresses user safety and security including access for emergency response services, contributing to Edmonton's livability.

Transportation Mode Shift

Public transportation and active transportation modes are the preferred choice for more people making it possible for the transportation system to move more people more efficiently in fewer vehicles.

Well-Maintained Infrastructure

The transportation system is planned and developed so that the city is able to keep it in a good state of repair and future growth is accommodated in a fiscally responsible and sustainable manner.

Economic Vitality

Efficient movement of goods, convenient mobility of the labour force and access to a vibrant city centre are features of the transportation system that enhances the economic vitality and competitive advantage of Edmonton and the Capital Region.

CURRENT AND FUTURE CONDITIONS (CHAPTER 3)

In 2009, Edmonton is home to approximately 750,000 people and by 2040 will grow by 400,000 people. Edmonton's 2005 Household Travel Survey showed that of the 2.5 million trips made each day, Edmontonians traveled by car (77%), walking (11%), public transportation (9%), and bicycle (1%). This is one of the highest car dependence rates in Canada.

Edmontonians are spending more time in their cars, driving longer distances and dealing with increasingly congested streets. Between 1994 and 2005, Edmonton's population increased 13%. At the same time, the total amount of kilometres traveled by automobile in the city increased 32%. This shows that the amount of automobile travel is increasing at a much faster rate than the population. The result is increased roadway congestion that impedes the efficient movement of people, goods and emergency response services.

This car dependence contributes to a cycle of increased kilometres traveled, increased road congestion and the perceived need to build more roadways which will require more taxpayer dollars for operation and maintenance.

This is a fiscally and environmentally unsustainable cycle. In addition, there are major health risks associated with long trip distances and automobile dependence such as physical inactivity, air pollution, motor vehicle collisions and mental health effects.

TRANSPORTATION AND LAND USE INTEGRATION (CHAPTER 4)

The City will integrate land use planning and transportation decisions to create a compact and efficient urban form.

Transportation provides access to land, thereby affecting its desirability and value, while the mix and intensity of land uses results in activities that generate demands on the transportation system. Building communities around effective transit service will decrease the need for other public infrastructure investment throughout the region, and provide viable alternative transportation modes that lower Edmonton's carbon and ecological footprint and lessen demand on energy and natural resources.

Focusing industrial developments in close proximity to goods and services movement corridors is efficient, adds to the economic vitality of the city and Capital Region and reduces goods and services movement traffic through residential areas.

PUBLIC TRANSPORTATION (CHAPTER 5)

Developing and expanding the existing public transportation system while capitalizing on new opportunities for public transportation within the greater Edmonton area are cornerstones of the Transportation Master Plan. To make public transportation the preferred choice of more people, Edmonton must make a large series of improvements to the transit system as well as to its physical, social and economic context. A comprehensive public transportation system made up of a variety of service strategies, including premium transit, bus service and disabled adult transit service (DATS) is a key to achieve the City Vision and Strategic Goals.

To achieve this, the City will:

- Pursue expansion of the LRT to all sectors with a goal to increase transit ridership and transit mode split, and spur the development of compact, urban communities.
- Pursue implementation of an expanded, city-wide premium transit network which will provide faster, more reliable service with direct connections to major destinations.
- Develop an efficient, effective, accessible and integrated bus, premium bus and LRT network to serve Edmonton with connections to the Capital Region. The network will include services for persons with mobility challenges.
- Use technology such as transit priority, passenger information systems and ITS to improve the reliability, efficiency and passenger information systems to make transit a more competitive mode of travel.

ACTIVE TRANSPORTATION (CHAPTER 6)

Active transportation is any mode of transportation by which people use their own energy to power their motion such as biking or walking. Some of the benefits of active modes of transportation are that it builds health and exercise into one's daily routine, helps to create a strong sense of community, and reduces the greenhouse gas emissions related to transportation by reducing vehicle volumes and maximizing the effective use of existing infrastructure.

To encourage more active transportation, the City will create a more walkable environment, a cycle-friendly city and an integrated network of multi-use trail facilities.

Active transportation should be viewed as being year round and available for all citizens; therefore the city must have a robust maintenance policy for all seasons.

ROADS (CHAPTER 7)

Roads are the foundation of Edmonton's transportation system. Roads significantly affect the economic vitality and competitiveness of Edmonton and the Capital Region, as they facilitate the movement of goods and services, emergency response services, and people using public transit, vehicles, taxis, bicycles and active modes. As Edmonton evolves from a mid-size prairie city to a large metropolitan area, it is inevitable that congestion levels will increase, particularly during peak periods. Physical, financial and community constraints in many areas make it unfeasible or even undesirable to build or expand roads to alleviate congestion. As such, the City of Edmonton will need to place greater emphasis on strategies to optimize the use of the existing road system.

These strategies include:

- Land use development strategies
- Promoting use of transit and active transportation modes
- Managing existing roadways more efficiently
- Transportation Demand Management (TDM)
- Selectively adding more roadway capacity

The City will attempt to maintain or improve the level of service for transit and goods and services movement by giving priority to roadway projects that enhance these movements. Adding roadway capacity to serve commuter traffic will not be a priority for major road projects. The focus of improvements for commuter traffic will be on optimizing the existing roadway operations.

GOODS AND SERVICES MOVEMENT (CHAPTER 8)

The Capital Region, including Edmonton, is a major manufacturing, logistics and distribution centre. It is essential to the economy that commercial transportation is able to move freely throughout the Region. Safe, efficient and effective movement of people, goods and services is essential to supporting and fostering the economic vitality and competitive advantage of Edmonton and the Region. An efficient system is cost effective in terms of time, energy consumption and infrastructure needs.

Key corridors for the movement of goods and services are:

- Outer Ring Road – Anthony Henday Drive
- Inner Ring Road – Consists of Yellowhead Trail, 170 Street, 75 St/ Wayne Gretzky Drive, Whitemud Drive
- Highway Connectors – Yellowhead Trail, Whitemud Drive, Calgary Trail, and others

In addition to these corridors, rail and air transport are important components of the regional transportation network. The City of Edmonton will work with other jurisdictions to ensure that Edmonton has a safe and efficient goods movement network that connects well with other transportation modes and facilities.

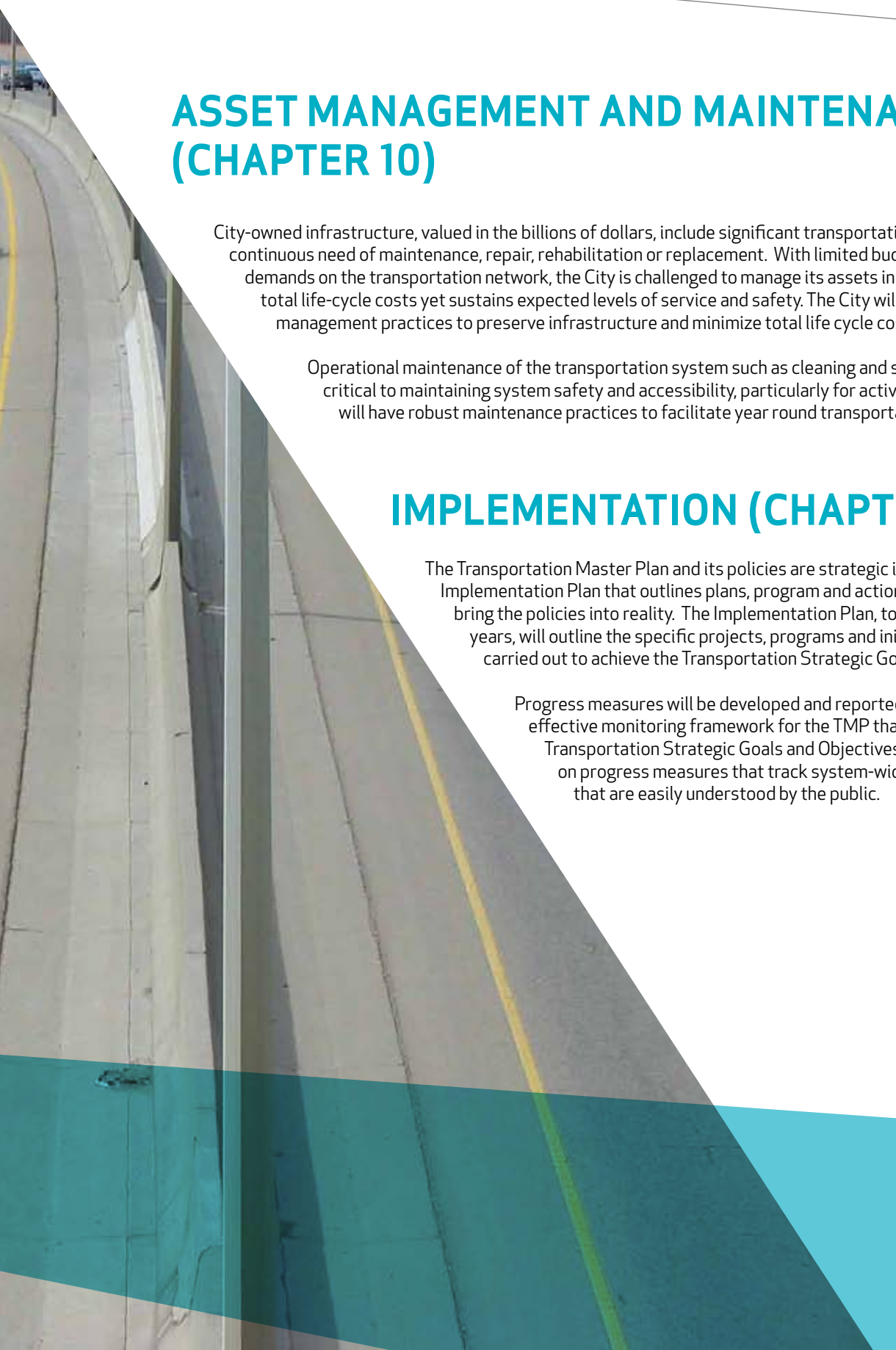
Photo by Raffaella Loro

REGIONAL INTERFACE (CHAPTER 9)

As Alberta's capital city and the major urban centre within the Capital Region, Edmonton has become the focus of complex issues that demand a regional perspective. The Capital Region Board, made up of Edmonton and twenty-four surrounding municipalities, is a decision making body that was established by Provincial legislation in April 2008. The Board's mandate is to create a comprehensive plan to manage regional growth, the Capital Region Growth Plan, with the initial phase having been completed in June 2009.

The City, as part of the Capital Region Board, will work constructively with the Capital Region Board as it prepares the Capital Region Growth Plan and conform to the plan once it is formally adopted. In addition, the City will work with the Capital Region Board to cooperatively plan and implement system improvements such as:

- Region-wide system of inter-municipal transit
- Region-wide land use planning principles to support compact growth
- Inter-modal facilities and connections to support rail and air transportation
- Roads of regional significance within the city as well as highway facilities with cooperation of the Province.
- Regional multi-use facilities and TDM initiatives.



ASSET MANAGEMENT AND MAINTENANCE (CHAPTER 10)

City-owned infrastructure, valued in the billions of dollars, include significant transportation assets that are in continuous need of maintenance, repair, rehabilitation or replacement. With limited budgets and increasing demands on the transportation network, the City is challenged to manage its assets in a way that minimizes total life-cycle costs yet sustains expected levels of service and safety. The City will use best asset management practices to preserve infrastructure and minimize total life cycle costs.

Operational maintenance of the transportation system such as cleaning and snow plowing are critical to maintaining system safety and accessibility, particularly for active modes. The City will have robust maintenance practices to facilitate year round transportation.

IMPLEMENTATION (CHAPTER 11)

The Transportation Master Plan and its policies are strategic in nature. An Implementation Plan that outlines plans, program and actions will be developed to bring the policies into reality. The Implementation Plan, to be updated every three years, will outline the specific projects, programs and initiatives that will be carried out to achieve the Transportation Strategic Goals.

Progress measures will be developed and reported yearly to create an effective monitoring framework for the TMP that closely considers the Transportation Strategic Goals and Objectives. Emphasis will be placed on progress measures that track system-wide, long-term changes and that are easily understood by the public.

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